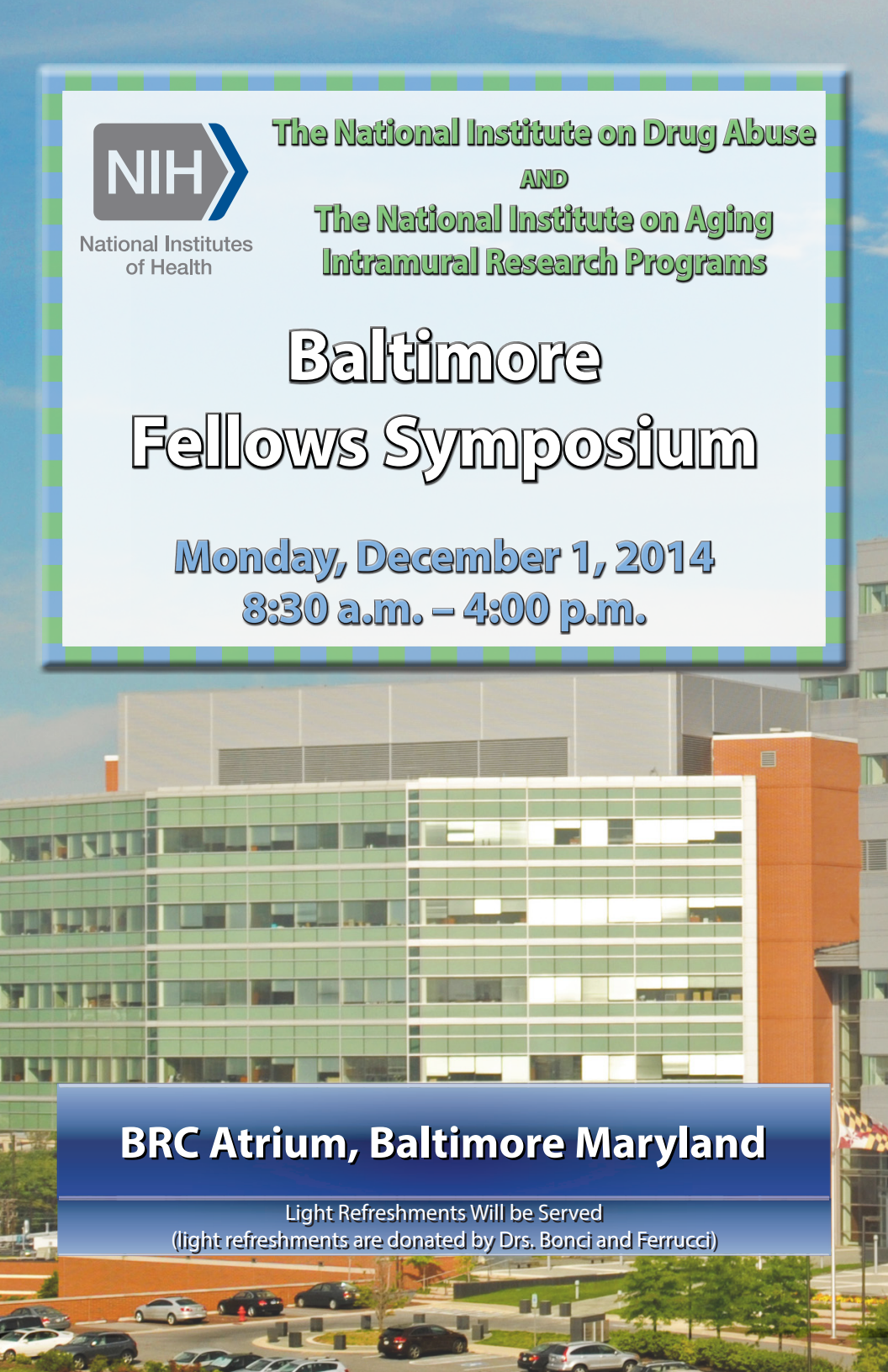
NIH
National Institutes of Health
The National Institute on Drug Abuse
AND
The National Institute on Aging
Intramural Research Programs
Baltimore
Fellows Symposium
Monday, December 1, 2014
8:30 a.m. – 4:00 p.m.
BRC Atrium, Baltimore Maryland
Light Refreshments Will be Served
(light refreshments are donated by Drs. Bonci and Ferrucci)

Schedule for the Day

8:30 a.m. **Coffee, tea, and light breakfast**
(Atrium)

9:00-9:25 **Skill Blitz:** Management 101
(Room 3C211)

Skill Blitz: Transferable Skills
(Room 3C219)

9:30-9:55 **Skill Blitz:** Cover Letters and Resumés
(Room 3C211)

Skill Blitz: Find the Career for You
(Room 3C219)

9:55-10:15 **Break**

10:15-11:35 **Research talks by FARE winners**
(Rooms 3C211, 3C219, 3C227)

11:35-12:30 **Representatives from NIH and local colleges**
(Atrium)

12:30-1:30 **Keynote Address**
(Atrium)

"The Current Climate for Careers in Science"
Alan Leshner, Ph.D.
CEO, American Association for the Advancement of Science
Executive Publisher, Science

1:30-2:30 **Poster Session**
(Atrium)

2:30-3:50 **Research talks by FARE winners**
(Rooms 3C211, 3C219)

4:00 **Art of Science contest winner announced**

Skill Blitz Sessions

These short sessions are designed to give you an overview of the skills required for a successful job search. Each presentation is limited to 20 minutes to leave time for a few questions. Presenters will give you the highlights of the topics, with ideas on how to follow up with additional resources. Speakers are NIH OITE staff.

Management 101

This session will discuss the common challenges and pitfalls that new managers experience regardless if you are heading to academics, industry, non-profit, or government. Learn the top things about managing your staff.

Transferable Skills

How do you talk about the skills you already have or gain additional skills so employers see you as a competitive candidate?

Cover Letters and Resumés

There are few simple rules for a cover letter. Make this part of your job package shine. Learn the difference between a resumé and CV and the purpose of a resumé.

Find the Career for You

Your dream job does exist. If you are still pondering what is next, come to this session to map out a plan to determine how your skills, interests and values can lead you to your perfect job.

Skill Blitz Presenters

Lori Conlan, Ph.D.
Director, Office of Postdoctoral Services
conlanlo@mail.nih.gov

Lori Conlan received her Ph.D. in biochemistry and biophysics from Texas A&M University. She worked for several years as a postdoc before transitioning from the lab to focus on career issues for the next generation of scientists. Lori is the director of two offices in OITE, the Office of Postdoctoral Services and the NIH Career Services Center, assisting the 4000 NIH postdocs in their career choices.

Phil Ryan, Ph.D.
Director, Student Services, Graduate Partnership Program
ryanp@od.nih.gov

Phil Ryan earned his Ph.D. in genetics from George Washington University via the GPP at NCI, where he studied the regulation of ubiquitin ligases. During his postdoc, Phil did a detail in OITE working on a variety of projects. In 2011, he joined OITE full time and now is Director of Student Services for the NIH GPP and continues his work in the OITE Career Services Center.

NIH and College Representatives

NIH Library

Barbara Brandys,
Informationist/Biomedical Librarian

NCI Technology Transfer Center

Vio Conley, M.S.,
Technology Transfer Specialist for NIA and NIDA

NIDA Office of Science Policy and Communication, Public Information and Liaison Branch

Sheri Grabus, Ph.D., *Press Officer*
Shirley Simson, *Deputy Press Officer*
Kim DiFonzo, *Senior Media Specialist*

NIA Office of Communications and Public Liaison

Britt Ehrhardt, M.H.S.,
Senior Technical Writer/Editor

The Community College of Baltimore County

Jennifer Kilbourne, Ph.D.,
Biology Coordinator and Chair, CCBC Dundalk

FARE Winner Presentations
Morning Sessions

Session 1 • Room 3C211
Moderator: Beverly Baptiste, Ph.D. (NIA)

10:15-10:35 Melody Furnari, Ph.D.
NIDA, Clinical Pharmacology and Therapeutics Branch
Real-time stress, craving, and mood differences in drug treatment responders and nonresponders

10:35-10:55 Susan Walker, Ph.D.
NIA, Laboratory of Clinical Investigation
Peripheral blockade of the cannabinoid-1 receptor exerts beneficial effects on pancreatic beta cell function

10:55-11:15 Anna Li, Ph.D.
NIDA, Behavioral Neuroscience Branch
Role of histone deacetylase 5 in dorsal striatum in incubation of methamphetamine craving

11:15-11:35 Krisztina Marosi, Ph.D.
NIA, Laboratory of Neurosciences
Roles of ketone bodies in neuronal energy metabolism and plasticity

Session 2 • Room 3C219
Moderator: Jennifer Illuzzi, Ph.D. (NIA)

10:15-10:35 Taraswi Banerjee, Ph.D.
NIA, Laboratory of Molecular Biology and Immunology
Catalytic strand separation by RECQ1 Is required for RPA-mediated response to replication stress

10:35-10:55 Bill Kowalczyk, Ph.D.
NIDA, Clinical Pharmacology and Therapeutics Branch
Beyond "Does it work?": using real-time human field data to test a medication's mechanism of action

10:55-11:15 Sara Mitchell, Ph.D.
NIA, Translational Gerontology Branch
Unraveling the mechanisms of calorie restriction: the role of diet, sex, and dose

11:15-11:35 F. Javier Rubio, Ph.D.
NIDA, Behavioral Neuroscience Branch
Unique molecular alterations in dorsal striatal neuronal ensembles selectively activated by environmental cues associated with methamphetamine seeking in rats

FARE Winner Presentations
Morning Sessions

Session 3 • 3C227
Moderator: Comfort A. Boateng, Ph.D. (NIDA)

10:15-10:35 Chinmoyee Maharana, Ph.D.
NIA, Laboratory of Neurosciences
Presenilin 1 mutations impair neuronal bioenergetics and dietary energy restriction ameliorates cognitive deficits caused by a presenilin 1 mutation

10:35-10:55 Dong Wang, Ph.D.
NIDA, Behavioral Neuroscience Branch
Median raphe nucleus regulates hippocampal ripple oscillation and memory consolidation

10:55-11:15 Huiming Lu, Ph.D.
NIA, Laboratory of Molecular Gerontology
Senescence induced by RECQL4 dysfunction contributes to Rothmund–Thomson syndrome features in mice

11:15-11:35 Lindsay De Biase, Ph.D.
NIDA, Cellular Neurobiology Branch
Microglia within adjacent basal ganglia nuclei exhibit distinct membrane properties and divergent responses to pathology

FARE Winner Presentations
Afternoon Sessions

Session 4 • Room 3C211
Moderator: Michael Rouse, Ph.D. (NIA)

2:30-2:50 Magdalena Misiak, Ph.D.
NIA, Laboratory of Molecular Gerontology
Evidence for the involvement of DNA polymerase beta in the regulation of neurogenesis in aging and Alzheimer's disease

2:50-3:10 Leslie Whitaker, Ph.D.
NIDA, Behavioral Neuroscience Branch
Associative learning drives the formation of silent synapses in neuronal ensembles of the nucleus accumbens

3:10-3:30 Guobing Chen, Ph.D.
NIA, Laboratory of Molecular Biology and Immunology
Histone methyltransferase Ezh2 is critical for activation-induced CD8 T cell proliferation and survival

3:30-3:50 Salman Tajuddin, Ph.D.
NIA, Laboratory of Epidemiology and Population Science
Genome-wide association analysis of carotid intima-media thickness among African Americans

Session 5 • Room 3C219
Moderator: John Fedota, Ph.D. (NIDA)

2:30-2:50 Vivek Kumar, Ph.D.
NIDA, Molecular Targets and Medications Discovery Branch
Novel and high affinity fluorescent ligands for the serotonin transporter based on (S)-citalopram

2:50-3:10 Emmette Hutchinson, Ph.D.
NIA, Laboratory of Neurosciences
An approach for the replacement of adult neurons through direct conversion of reactive astrocytes into neurons

3:10-3:30 Daniele Caprioli, Ph.D.
NIDA, Behavioral Neuroscience Branch
Incubation of methamphetamine craving after prolonged self-imposed abstinence in a contingency management alternative-reward procedure

3:30-3:50 Ji Heon Noh, Ph.D.
NIA, Laboratory of Genetics
Molecular regulatory mechanism and function of mitochondrial lncRNAs

Poster Presentations

1 **Daniele Caprioli ***

NIDA • Behavioral Neuroscience Branch

Incubation of methamphetamine craving after prolonged self-imposed abstinence in a contingency management alternative-reward procedure

2 **Murat Bilgel**

NIA • Laboratory of Behavioral Neuroscience

APOE ε4 allele is associated with an earlier onset of amyloid accumulation

3 **Shamia Faison**

NIDA • Behavioral Neuroscience Branch

Effect of levo-tetrahydropalmatine on nicotine self-administration

4 **Hachi Manzur**

NIA • Laboratory of Behavioral Neuroscience

Back-propagation of prediction error signals in the basal forebrain underlies the temporal dynamics of learning

5 **Rebecca Fallon**

NIDA • Behavioral Neuroscience Branch

Assessing dendritic spine plasticity in transgenic rat nucleus accumbens neuronal ensembles activated during amphetamine sensitization

6 **Anna McCarrey**

NIA • Laboratory of Behavioral Neuroscience

Longitudinal cognitive trajectories of older individuals vary by sex

7 **Sam Golden**

NIDA • Behavioral Neuroscience Branch

Ventral striatal projections to the lateral habenula modulate the motivational component of aggressive behavior

8 **Amy Spiegel**

NIA • Laboratory of Behavioral Neuroscience

Regionally selective decline in hippocampal somatostatin-immunoreactive neuron number in aged rhesus monkeys with memory impairment

9 **Anna Li ***

NIDA • Behavioral Neuroscience Branch

Incubation of methamphetamine craving is associated with selective increases of the epigenetic Hdac5 gene in FACS-sorted Fos-positive activated neurons in dorsal striatum

*2015 FARE Winner

Poster Presentations

10 **Davide Guerrieri**
NIA • Laboratory of Neurosciences
Time-dependent effects of exercise and exercise-mimetics

11 **Nathan Marchant**
NIDA • Behavioral Neuroscience Branch
Context-induced relapse to alcohol seeking after punishment-imposed abstinence recruits ventral subiculum projections to nucleus accumbens shell

12 **Chinmoyee Maharana ***
NIA • Laboratory of Neurosciences
Presenilin 1 mutations impair neuronal bioenergetics and dietary energy restriction ameliorates cognitive deficits caused by a presenilin 1 mutation

13 **F. Javier Rubio ***
NIDA • Behavioral Neuroscience Branch
Unique molecular alterations in dorsal striatal neuronal ensembles selectively activated by environmental cues associated with methamphetamine seeking in rats

14 **Ioannis Grammatikakis**
NIA • Laboratory of Genetics
hnRNP H2 regulates alternative splicing of neuronal differentiation factor TRF2

15 **Maria Elena Secci**
NIDA • Behavioral Neuroscience Branch
Involvement of cortico-striatal glutamateric neurotransmission in the reinfrocing effects of delat-9 -tetrahydrocannabinol (THC)

16 **Jiyoung Kim**
NIA • Laboratory of Genetics
RNA-binding protein HuR competes with miR-424 to control the stability of lncRNA OIP5-AS1

17 **Marco Venniro**
NIDA • Behavioral Neuroscience Branch
Persistent and inflexible palatable food preference in rats with a history of limited and extended access methamphetamine self-administration

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Poster Presentations

18 **Amaresh Panda**
NIA • Laboratory of Genetics
Regulation of muscle regeneration by Myf5 RNA-binding activity

19 **Ken Wakabayashi**
NIDA • Behavioral Neuroscience Branch
Central and peripheral contributions to dynamic changes in nucleus accumbens glucose induced by intravenous cocaine

20 **Jaimy Joy**
NIA • Laboratory of Molecular Biology and Immunology
NF-kB in cellular senescence

21 **Dong Wang ***
NIDA • Behavioral Neuroscience Branch
Median raphe nucleus regulates hippocampal ripple oscillation and memory consolidation

22 **Lisa Russell**
NIA • Laboratory of Molecular Biology and Immunology
The aging immune response: understanding the role of B cells

23 **Chen Yang**
NIDA • Behavioral Neuroscience Branch
Affective circuits involving the prefrontal cortex: an optogenetic study in mice

24 **Kimberly Zanotti**
NIA • Laboratory of Molecular Biology and Immunology
DNA breaks triggered by activation-induced deaminase activity in immunoglobulin variable genes during antibody diversification

25 **Brandon Warren**
NIDA • Behavioral Neuroscience Branch
Role of prefrontal cortical neuronal ensembles in appetitive (palatable food) operant extinction learning in rats

26 **Beverly Baptiste**
NIA • Laboratory of Molecular Gerontology
Cleaning up after the radicals: small molecule enhancement of oxoguanine DNA glycosylase

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Poster Presentations

27 **Emily Simons Wires**

NIDA • Office of the Scientific Director

Cafeteria diet alters endoplasmic reticulum calcium homeostasis in hepatocytes of rats

28 **Manikandan Paramasivam**

NIA • Laboratory of Molecular Gerontology

Cell cycle regulated interaction of FANCD2 with DNA damage response proteins following DNA interstrand crosslink formation

29 **Leslie Whitaker ***

NIDA • Behavioral Neuroscience Branch

Associative learning drives the formation of silent synapses in neuronal ensembles of the nucleus accumbens

30 **Raghavendra Shamanna**

NIA • Laboratory of Molecular Gerontology

Selective degradation of Werner Syndrome protein, a RecQ helicase, is associated with Camptothecin-induced DNA repair deficiency and cellular senescence

31 **Shannan White**

NIDA • Molecular Neuropsychiatry Branch

Imido-substituted naphthoquinone derivative as a neuroprotective agent in the treatment of Parkinson's Disease

32 **Rosa Berga Bolanos**

NIA • Translational Gerontology Branch

T Cell Factor-1 and beta-catenin specifically and critically control the generation and function of natural killer T cells

33 **Lindsay De Biase ***

NIDA • Cellular Neurobiology Branch

Microglia within adjacent basal ganglia nuclei exhibit distinct membrane properties

34 **Peter Sykora**

NIA • Laboratory of Molecular Gerontology

Oxidative DNA repair deficiency exacerbates Alzheimer-like pathology in mouse model

35 **Huikun Wang**

NIDA • Cellular Neurobiology Branch

Effects of cocaine on intracellular calcium of dopamine neurons in the ventral tegmental area

*2015 FARE Winner

Poster Presentations

36 **Brittany Simpson**
NIA • Laboratory of Neurosciences
Plasma metabolomic markers associated with cognitive performance during aging: the Baltimore Longitudinal Study of Aging

37 **Maria Andersson**
NIDA • Clinical Pharmacology and Therapeutics Branch
Bioanalysis of morphine-3-sulfate and morphine-6-sulfate in human urine and plasma using liquid chromatography tandem mass spectrometry

38 **Douglas Dluzen**
NIA • Laboratory of Epidemiology and Population Sciences
Differential miRNA expression influenced by race in hypertensive and non-hypertensive women

39 **Melody Furnari ***
NIDA • Clinical Pharmacology and Therapeutics Branch
Stress reactivity predicts substance abuse treatment outcome

40 **Yi He**
NIDA • Chemical Biology Branch
Optogenetic stimulation of red nucleus glutamate neurons inhibits cocaine self-administration in mice

41 **Jose Aceves Buendia**
NIDA • Integrative Neuroscience Branch
Electrophysiological diversity among glutamatergic neurons of the ventral tegmental area

42 **David Barker**
NIDA • Integrative Neuroscience Branch
Ultrasonic vocalizations: evidence for an affective opponent process during cocaine self-administration

43 **Jia Qi**
NIDA • Integrative Neuroscience Branch
A glutamatergic pathway from dorsal raphe-VGluT3 neurons to the ventral tegmental area promotes reward

44 **Aurelie Roux**
NIDA • Integrative Neuroscience Branch
Ethanol consumption induced quantitative brain lipid changes in mice

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Poster Presentations

45 **Comfort Boateng**

NIDA • Molecular Targets and Medications Discovery Branch

The development of novel dopamine D3 receptor-selective partial agonists as potential medications to treat psychostimulant abuse

46 **Hideaki Yano**

NIDA • Molecular Targets and Medications Discovery Branch

Development of novel Gs / Golf biosensors: Gs-Golf functional selectivity in dopamine D1 receptors

47 **John Fedota**

NIDA • Neuroimaging Branch

Differential modulation of reward anticipation by varenicline and nicotine in smokers

*2015 FARE Winner

Acknowledgements

Thanks to the following for their support:

NIH Office of Intramural Training and Education

NIDA and NIA Offices of the Scientific Director

NIDA Office of Education and Career Development

Visual Media staff

GSH

Baltimore Fellows Symposium Committee:

Jennifer Illuzzi, Ph.D. (NIA), Co-chair

Michael Rouse, Ph.D. (NIA), Co-chair

Comfort Boateng, Ph.D. (NIDA), Co-chair

John Fedota, Ph.D. (NIDA), Co-chair

Stephen Heishman, Ph.D. (NIDA)

Mary Pfeiffer, Ph.D. (NIDA)

Rolanda Morris (NIDA)

Arlene Jackson (NIA)

Taya Dunn (NIA)

The Baltimore Fellows Symposium Committee congratulates the 2015 FARE winners and encourages all eligible Fellows and Graduate Students to apply for the 2016 FARE competition next spring.

2016 Fellows Award for Research Excellence (FARE)

Abstracts accepted starting mid-February 2015. Watch for the FARE abstract workshop. Winners receive $1000 towards conference travel starting October 1, 2015.

https://www.training.nih.gov/felcom/fare

Notes

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